What is claimed is:

1. A method for treating tumors comprising:

a) pre-treating a host having a tumor by administering a therapeutically effective dose of a platelet-derived growth factor (PDGF) aptamer for a predetermined number of days; and

b) subsequently administering a therapeutically effective dose of a cytotoxic agent to said host.

2. The method of claim 1 wherein in step b) said cytotoxic agent is administered in combination with said PDGF aptamer.

3. The method of claim 1 wherein said PDGF aptamer is identified according to a method comprising:

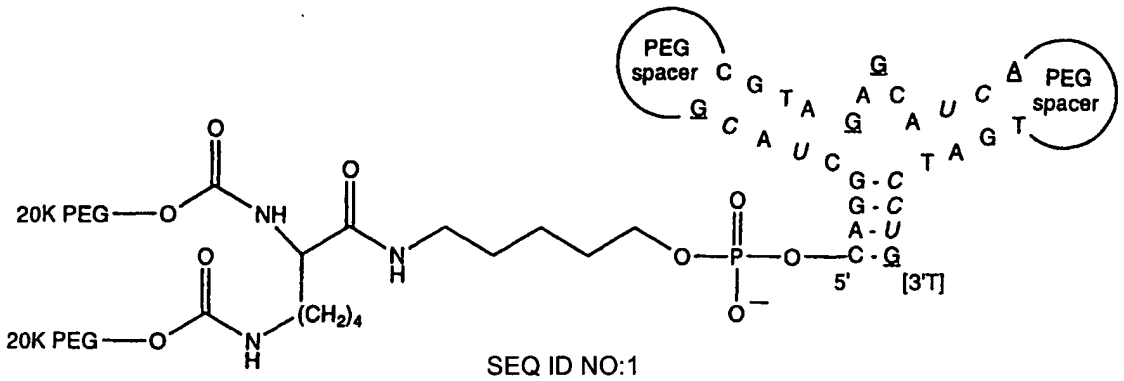
a) preparing a candidate mixture of nucleic acids;

b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and

d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

4. The method of claim 1 wherein said PDGF aptamer is:



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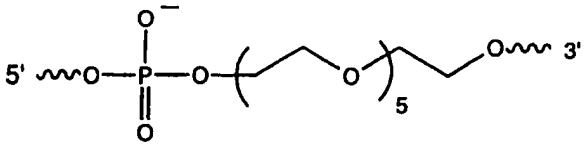
wherein: U at positions 6, 20 and 30 is 2'-fluoro-2'-deoxyuridine.
C at positions 8, 21, 28, and 29 is 2'-fluoro-2'-deoxycytidine.
G at positions 9, 15, 17, and 31 is 2'-O-Methyl-2'-deoxyguanosine.
A at position 22 is 2'-O-Methyl-2'-deoxyadenosine; and

wherein **PEG spacer =**



5. The method of claim 1 wherein said cytotoxic agent is selected from the group consisting of Bleomycin, Cisplatin, and Pt analogues; Carboplatin and Iproplatin, Cyclophosphamide, Daunorubicin, Doxofluoridine, Doxorubicin, Etoposide, Epirubicin, 5-Flurouracil, Gemzar, Ifosfamide, Melphalan, Methotrexate, Mithramycin, Mitomycin C, Mitoxanthrone, Streptozotocin, Taxol and Taxotere, Vincristine, Vinblastine, Vindesine, Vinorelbine, Topotecan and CPT-11.

6. A method for increasing the uptake of cytotoxic agents into a tumor comprising:

a) pre-treating a host having a tumor by administering a therapeutically effective dose of a platelet-derived growth factor (PDGF) aptamer for a predetermined number of days; and

b) subsequently administering a therapeutically effective dose of a cytotoxic agent to said host.

7. The method of claim 6 wherein in step b) said cytotoxic agent is administered in combination with said PDGF aptamer.

8. The method of claim 6 wherein said PDGF aptamer is identified according to a method comprising:

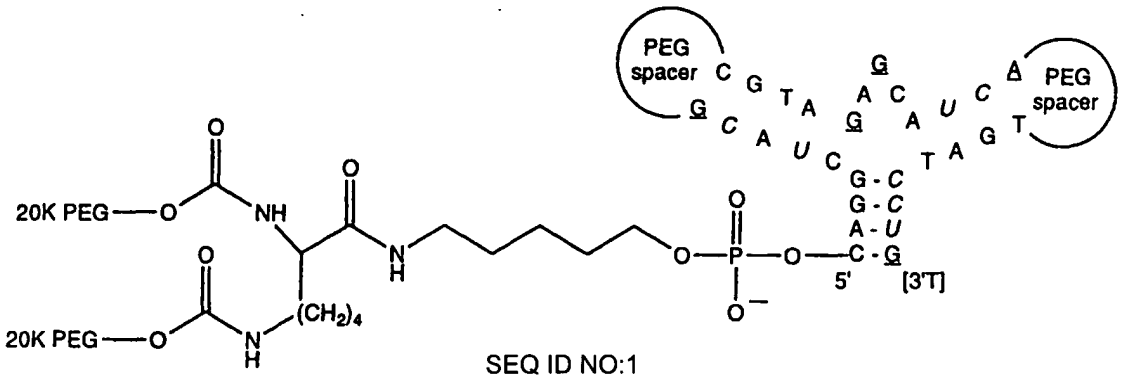
a) preparing a candidate mixture of nucleic acids;

b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and

d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

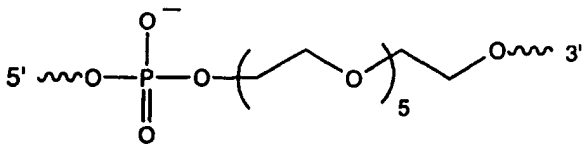
9. The method of claim 6 wherein said PDGF aptamer is:



SEQ ID NO:1

wherein: U at positions 6, 20 and 30 is 2'-fluoro-2'-deoxyuridine.
C at positions 8, 21, 28, and 29 is 2'-fluoro-2'-deoxycytidine.
G at positions 9, 15, 17, and 31 is 2'-O-Methyl-2'-deoxyguanosine.
A at position 22 is 2'-O-Methyl-2'-deoxyadenosine; and

wherein **PEG spacer =**



10. The method of claim 6 wherein said cytotoxic agent is selected from the group consisting of Bleomycin, Cisplatin, and Pt analogues; Carboplatin and Iproplatin, Cyclophosphamide, Daunorubicin, Doxofluoridine, Doxorubicin, Etoposide, Epirubicin, 5-Flurouracil, Gemzar, Ifosfamide, Melphalan, Methotrexate, Mithramycin, Mitomycin C, Mitoxanthrone, Streptozotocin, Taxol and Taxotere, Vincristine, Vinblastine, Vindesine, Vinorelbine, Topotecan and CPT-11.

11. A therapeutic composition comprising a PDGF aptamer and a cytotoxic agent.

12. The therapeutic composition of claim 11 wherein said PDGF aptamer is identified according to a method comprising:

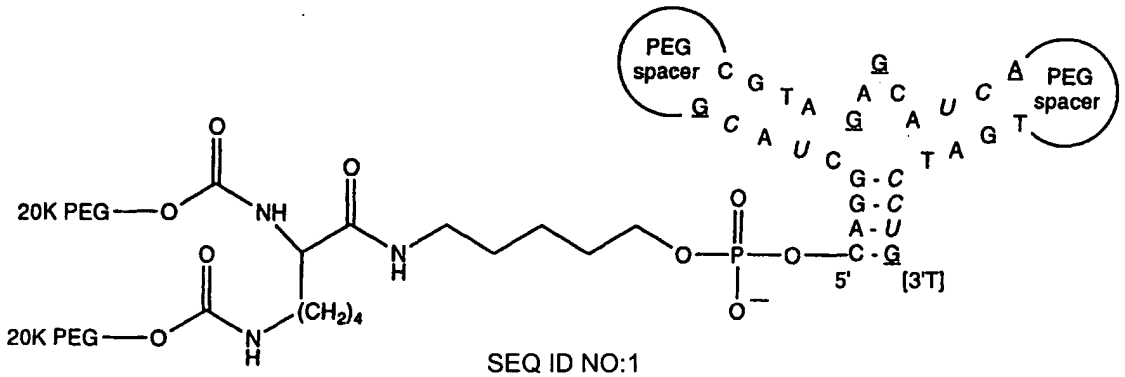
a) preparing a candidate mixture of nucleic acids;

b) contacting the candidate mixture of nucleic acids with PDGF, wherein nucleic acids having an increased affinity to PDGF relative to the candidate mixture may be partitioned from the remainder of the candidate mixture;

c) partitioning the increased affinity nucleic acids from the remainder of the candidate mixture; and

d) amplifying the increased affinity nucleic acids to yield a mixture of nucleic acids enriched for nucleic acids with relatively higher affinity and specificity for binding to PDGF, whereby a nucleic acid ligand of PDGF may be identified.

13. The therapeutic composition of claim 11 wherein said PDGF aptamer is:



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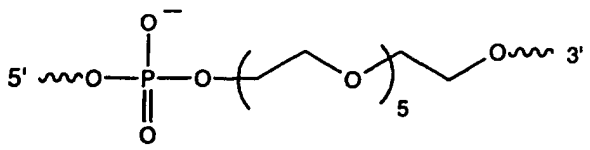
wherein: U at positions 6, 20 and 30 is 2'-fluoro-2'-deoxyuridine.
C at positions 8, 21, 28, and 29 is 2'-fluoro-2'-deoxycytidine.
G at positions 9, 15, 17, and 31 is 2'-O-Methyl-2'-deoxyguanosine.
A at position 22 is 2'-O-Methyl-2'-deoxyadenosine; and

wherein **PEG spacer =**



14. The therapeutic composition of claim 11 wherein said cytotoxic agent is selected from the group consisting of Bleomycin, Cisplatin, and Pt analogues;

Carboplatin and Iproplatin, Cyclophosphamide, Daunorubicin, Doxofluoridine, Doxorubicin, Etoposide, Epirubicin, 5-Flurouracil, Gemzar, Ifosfamide, Melphalan, Methotrexate, Mithramycin, Mitomycin C, Mitoxanthrone, Streptozotocin, Taxol and Taxotere, Vincristine, Vinblastine, Vindesine, Vinorelbine, Topotecan and CPT-11

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